

INTERNATIONAL SEARCH REPORT

International Application No
PCT/GB2005/001087

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 F16H55/14 F16H57/00 F16D3/52 F04C29/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 F16D F16H F04C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 344 945 A (EATON CORPORATION) 6 December 1989 (1989-12-06) claim 1; figures 2-6 -----	1-3, 5, 8, 14, 16-18
X	PATENT ABSTRACTS OF JAPAN vol. 2003, no. 04, 2 April 2003 (2003-04-02) & JP 2002 349672 A (MITSUBISHI MOTORS CORP), 4 December 2002 (2002-12-04) abstract; figures 1, 3 -----	1-9, 12, 14-17
X	US 86 533 A (JOHN HAFFNER) 2 February 1869 (1869-02-02) figure 5 -----	1-5, 8, 14, 17, 18
X	US 5 692 410 A (FENELON ET AL) 2 December 1997 (1997-12-02) the whole document -----	1-11, 14, 17, 18
		-/-

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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Date of the actual completion of the international search

10 June 2005

Date of mailing of the international search report

22/06/2005

Name and mailing address of the ISA

European Patent Office, P.B. 6816 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Meyer, T

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PCT/GB2005/001087

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	BE 488 019 A (STAATSMIJNEN NEDERLAND) 15 April 1949 (1949-04-15) page 4, line 2 - line 29; figures 1-3 -----	1-8, 14, 17, 18
X	US 5 259 261 A (MICHEL ET AL) 9 November 1993 (1993-11-09) column 2, line 46 - line 62 -----	1-5, 8, 14, 17, 18
X	EP 0 987 471 A (BORG-WARNER AUTOMOTIVE, INC) 22 March 2000 (2000-03-22) paragraph '0034! - paragraph '0053! paragraph '0051!; figure 5 -----	1-11, 14, 17, 18
X	US 3 991 818 A (WAGNER ET AL) 16 November 1976 (1976-11-16) the whole document -----	15 1-5, 8-12, 14, 17, 18
X	DE 29 41 117 A1 (FABBRICA ITALIANA MAGNETI MARELLI S.P.A) 24 April 1980 (1980-04-24) the whole document -----	1, 17, 18
X	DE 34 03 259 C1 (BROSE FAHRZEUGTEILE GMBH & CO KG, 8630 COBURG, DE) 14 August 1985 (1985-08-14) the whole document -----	1, 17, 18
X	US 5 787 755 A (PERIOU ET AL) 4 August 1998 (1998-08-04) the whole document -----	1, 17, 18
X	SU 1 078 159 A1 (VOROSHILOVGRADSKIY MASHINOSTROITELNYJ INSTITUT) 7 March 1984 (1984-03-07) figures 1,2 -----	1, 13, 17
A	DE 101 14 079 A1 (CARL FREUDENBERG KG) 2 October 2002 (2002-10-02) column 4, line 2 - line 8; figure 1 -----	13
A	US 5 893 355 A (GLOVER ET AL) 13 April 1999 (1999-04-13) the whole document -----	1, 15-18

INTERNATIONAL SEARCH REPORT

Information on patent family members

Inte.....n Application No
PCT/GB2005/001087

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 0344945	A	06-12-1989	US DE DE EP JP JP	4924839 A 68904987 D1 68904987 T2 0344945 A2 2037113 A 2772976 B2	15-05-1990 01-04-1993 09-09-1993 06-12-1989 07-02-1990 09-07-1998
JP 2002349672	A	04-12-2002		NONE	
US 86533	A			NONE	
US 5692410	A	02-12-1997	US US AU WO US US AU CA EP JP WO	5452622 A 5307705 A 6092696 A 9641087 A1 5653144 A 5943913 A 6298294 A 2155507 A1 0682755 A1 8506649 T 9418476 A1	26-09-1995 03-05-1994 30-12-1996 19-12-1996 05-08-1997 31-08-1999 29-08-1994 18-08-1994 22-11-1995 16-07-1996 18-08-1994
BE 488019	A			NONE	
US 5259261	A	09-11-1993	EP CA DE	0514565 A1 2068916 A1 59105461 D1	25-11-1992 22-11-1992 14-06-1995
EP 0987471	A	22-03-2000	US EP	6234127 B1 0987471 A2	22-05-2001 22-03-2000
US 3991818	A	16-11-1976		NONE	
DE 2941117	A1	24-04-1980	ES FR	252971 Y 2438764 A1	16-10-1981 09-05-1980
DE 3403259	C1	14-08-1985		NONE	
US 5787755	A	04-08-1998	FR CN EP JP MX	2699621 A1 1094115 A 0607718 A1 6323398 A 9308007 A1	24-06-1994 26-10-1994 27-07-1994 25-11-1994 31-08-1994
SU 1078159	A1	07-03-1984		NONE	
DE 10114079	A1	02-10-2002		NONE	
US 5893355	A	13-04-1999		NONE	